

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. A method of allowing a user to selectively control voice communication over a voice over Internet protocol (VoIP) connection path and a public switched telephone network (PSTN) connection path comprising:

(a) establishing a voice communication link over either a VoIP connection path between a user computer and a remote telephone or a PSTN connection path between a user telephone and the remote telephone, the established voice communication link controlled by a server computer; and

(b) in response to receiving, at the user computer, a request from a user to change the established voice communication link, the server computer:

(i) disconnecting the established voice communication link;  
and

(ii) creating an alternative voice communication link over the other of the VoIP connection path between the user computer and the remote telephone or the PSTN communication path between the user telephone and the remote telephone.

2. The method of Claim 1 further comprising, in response to receiving at the user computer, a request from a user to reestablish the established voice communication link in the event the server computer fails to create the alternative voice communication link, the server computer reestablishing the established voice communication link.

3. The method of Claim 1 wherein the user computer includes a soft-phone application having a user interface for receiving user inputs.

4. The method of Claim 3 wherein the user interface includes a phone icon the color of which is determined by whether the active voice communication link is the established voice communication link or the alternative voice communication link.

5. The method of Claim 1 wherein the user computer includes a soft-phone application having a user interface for receiving user inputs.

6. The method of Claim 5 wherein the user interface includes a phone icon the color of which is determined by whether the active voice communication link is the established voice communication link or the alternative voice communication link.

7. The method of Claim 1 wherein the server computer includes an application program that selectively produces a PSTN port object and a VoIP port object depending on whether the active voice communication link is the established voice communication link or the alternative voice communication link.

8. The method of Claim 7 wherein the VoIP port object includes a first module for encoding telephone voice signals into a form suitable for transmission using a predetermined protocol and a second module suitable for packetizing the encoded telephone voice signals prior to transmission to the user computer.

9. The method of Claim 8 wherein said second module also depacketizes encoded telephone voice signals received from the user computer and said first module also decodes the depacketized encoded telephone voice signals.

10. The method of Claim 7 wherein said application program includes a first program module for placing call control signals in a form suitable for packetizing and a second program module for packetizing the call control signals.

11. The method of Claim 10 wherein the second program module also depacketizes call control signals and the first program module converts the depacketized call controls signals into call control signals.

12. A method of controlling a user computer included in a communication system that allows a user to selectively control voice communication over a voice over Internet protocol (VoIP) connection path and a public switched telephone network (PSTN) connection path comprising:

causing the user computer to display a graphical user interface suitable for receiving user input allowing a user to choose between a VoIP connection path and a PSTN connection path;

in response to a user input designating a VoIP connection path, sending a message to a server computer that identifies the VoIP connection path as the user's choice; and

in response to a user input designating the PSTN connection path, sending a message to the server computer that identifies the PSTN connection path as the user's choice.

13. The method of Claim 12 wherein the graphical user interface includes a phone icon the color of which is dependent upon the connection path chosen by the user.

14. The method of Claim 12 including determining if the user computer is configured for both a VoIP connection path and a PSTN connection path.

15. The method of Claim 12 wherein the user computer sends a voice connection off message to the server computer if the connection path other than the connection path chosen by the user is in use when the user makes a choice.

16. A method of controlling a server computer included in a communication system that allows a user to selectively control voice communication over a voice over Internet protocol (VoIP) connection path and a public switched telephone network (PSTN) connection path comprising:

in response to the server computer receiving a message from a user computer designating the use of a VoIP connection path, creating a VoIP port object for controlling voice communication over said VoIP connection path; and

in response to the server computer receiving a message from a user computer designating the use of a PSTN connection path, creating a PSTN port object for controlling voice communication over said PSTN connection path.

17. The method of Claim 16 wherein the VoIP port object includes a first module for encoding telephone voice signals into a form suitable for transmission using a predetermined protocol and a second module suitable for packetizing the encoded telephone voice signals prior to transmission to the user computer.

18. The method of Claim 17 wherein said second module also depacketizes encoded telephone voice signals received from the user computer and said first module also decodes the depacketized encoded telephone voice signals.

19. The method of Claim 16 wherein said application program includes a first program module for placing call control signals in a form suitable for packetizing and a second program module for packetizing the call control signals.

20. The method of Claim 19 wherein the second program module also depacketizes call control signals and the first program module converts the depacketized call controls signals into call control signals.

21. A voice communication system having a voice over Internet protocol (VoIP) connection path and a public switched telephone network (PSTN) connection path, said voice communication system comprising:

at least one user computer for generating, in response to user input, messages for controlling the creation of said VoIP connection path and said PSTN connection path and sending said messages to a server computer; and

a server computer for receiving the messages generated by said at least one user computer and, in accordance therewith, controlling the creation of either said VoIP connection path or said PSTN connection path.

22. The system of Claim 21 wherein said at least one user computer includes a soft-phone application that includes a graphical user interface for receiving user input.

23. The system of Claim 22 wherein said graphical user input includes a phone icon the color of which is dependent on which of the VoIP connection path and the PSTN connection path is created.

24. The system of Claim 21 wherein the server computer includes an application program that selectively produces a VoIP port object and a PSTN port object depending upon whether the VoIP connection path or the PSTN connection path is created.

25. The system of Claim 24 wherein the VoIP port object includes a first module for encoding telephone voice signals into a form suitable for transmission using a predetermined protocol and a second module suitable for packetizing the encoded telephone voice signals prior to transmission to the user computer.

26. The system of Claim 25 wherein said second module also depacketizes encoded telephone voice signals received from the user computer and said first module also decodes the depacketized encoded telephone voice signals.

27. The system of Claim 24 wherein said application program includes a first program module for placing call control signals in a form suitable for packetizing and a second program module for packetizing the call control signals.

28. The system of Claim 27 wherein the second program module also depacketizes call control signals and the first program module converts the depacketized call controls signals into call control signals.